

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058015

Luminaire Tested: S122RDR-S485D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058015  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D940-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

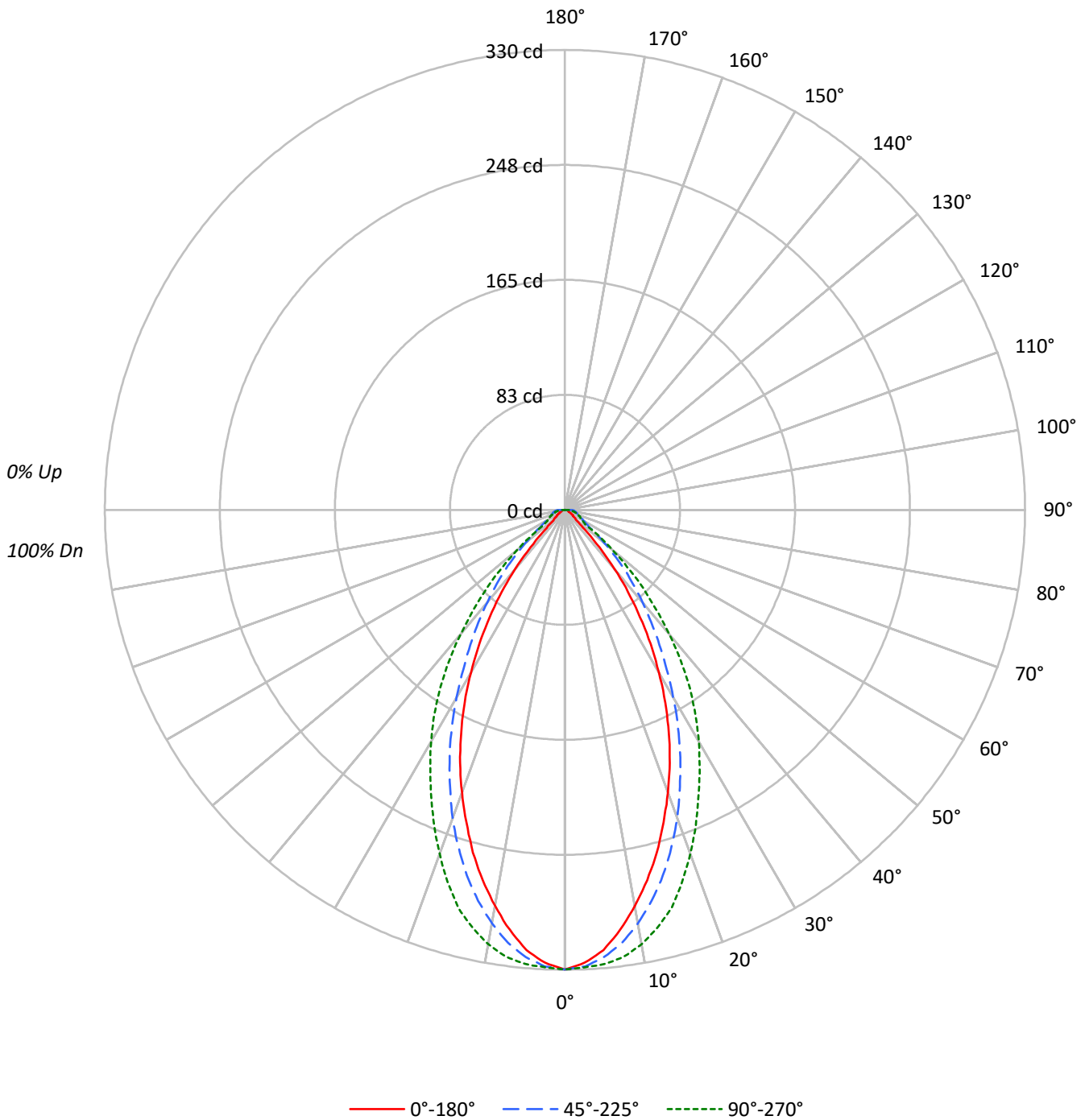
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 355.4 lumens  
Efficiency: N/A  
Efficacy: 18.1 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6086	6086	6086
5°	5874	5968	6061
10°	5409	5645	5930
15°	4864	5188	5647
20°	4242	4626	5161
25°	3587	3986	4618
30°	2868	3311	4091
35°	2120	2660	3514
40°	1339	2084	2799
45°	527	1566	2062
50°	273	1051	1269
55°	222	692	569
60°	162	561	513
65°	140	524	524
70°	135	545	513
75°	178	627	542
80°	266	808	606
85°	402	1334	805

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 2665 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.2	8.5
10°-20°	76.2	21.4
20°-30°	90.5	25.5
30°-40°	75.3	21.2
40°-50°	42.1	11.8
50°-60°	17.0	4.8
60°-70°	10.9	3.1
70°-80°	8.1	2.3
80°-90°	5.2	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	196.9	55.4
0°-40°	272.2	76.6
0°-60°	331.2	93.2
0°-90°	355.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	355.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	317	323	322	325	327	29
15°	255	262	272	286	296	71
25°	176	183	196	211	227	80
35°	94	103	118	138	156	58
45°	20	34	60	70	79	19
55°	7	14	22	21	18	6
65°	3	13	12	11	12	3
75°	2	9	9	8	8	3
85°	2	6	6	6	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	329.8	329.8	329.8	329.8	329.8
2.5°	325.3	330.4	327.9	327.9	328.5
5°	317.1	322.8	322.2	324.7	327.2
7.5°	303.9	310.2	313.3	319.0	323.4
10°	288.7	295.6	301.3	310.2	316.5
12.5°	272.3	279.2	287.4	298.8	307.0
15°	254.6	262.2	271.6	285.5	295.6
17.5°	235.0	243.2	253.9	269.1	279.8
20°	216.0	224.3	235.6	250.8	262.8
22.5°	196.5	203.4	215.4	230.6	245.1
25°	176.2	183.2	195.8	211.0	226.8
27.5°	156.0	163.0	175.6	191.4	209.1
30°	134.6	142.1	155.4	173.1	192.0
32.5°	114.3	121.9	135.8	155.4	174.4
35°	94.1	103.0	118.1	137.7	156.0
37.5°	74.5	84.6	101.7	120.0	136.4
40°	55.6	66.3	86.5	102.3	116.2
42.5°	36.6	49.3	72.6	85.9	96.7
45°	20.2	34.1	60.0	70.1	79.0
47.5°	11.4	22.1	47.4	55.6	60.6
50°	9.5	16.4	36.6	42.3	44.2
52.5°	7.6	15.2	27.8	31.0	29.7
55°	6.9	14.5	21.5	20.8	17.7
57.5°	5.7	14.5	17.1	15.2	15.2
60°	4.4	13.9	15.2	13.3	13.9
62.5°	3.8	13.3	13.9	12.6	12.6
65°	3.2	12.6	12.0	11.4	12.0
67.5°	2.5	11.4	11.4	10.7	10.7
70°	2.5	10.7	10.1	9.5	9.5
72.5°	2.5	9.5	9.5	8.8	8.8
75°	2.5	8.8	8.8	8.2	7.6
77.5°	2.5	7.6	8.2	7.6	6.9
80°	2.5	6.9	7.6	6.9	5.7
82.5°	2.5	6.3	6.9	6.3	5.1
85°	1.9	5.7	6.3	5.7	3.8
87.5°	1.9	5.7	6.3	5.1	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)